Nevada Mercury Air Emissions Control Program (NMCP)
Questions & Answers
November 2005

Q. What is the Nevada Mercury Air Emissions Control Program (NMCP)?

A. The Nevada Mercury Air Emissions Control Program (NMCP) builds on the successes of the Voluntary Mercury Reduction Program ("VMRP"). The NDEP believes that additional opportunities for mercury controls and reductions are possible. Likewise, the goals of the NMCP are (i) enhancing the program's monitoring, testing, recordkeeping and reporting requirements, (ii) expanding coverage of the program to all precious metal mining operations, and (iii) implementing improved and additional controls, through a regulatory program.

Q. How is this program different from the Voluntary Mercury Reduction Program?

A. The mercury program we are proposing will no longer be voluntary. Rather, it will be a regulatory program. Further improvements in control technology will be achieved through the development of case-by-case maximum achievable control technologies (NvMACT) for thermal processes that emit mercury. Specific operation and maintenance, testing, monitoring, reporting and recordkeeping will be required for each unit that emits mercury and these requirements will be incorporated into a state mercury permit. In addition, participation in the program will expand from the original four VMRP member companies to include all of the precious metal mining industry.

Q. Is there another program of this kind in another state or country?

A. The NMCP is the first regulatory program to control mercury air emissions from the precious metal mining industry.

Q. Why is Nevada's program focused on control of mercury?

A. While the health effects of mercury are well known and concerns have been expressed about the possible origins of elevated levels of mercury in the West, there is limited peer-reviewed research to help the NDEP understand the way that mercury air emissions move through the environment. Even without such data, the NDEP remains focused on its goal to control mercury air emissions and to minimize impacts to the environment. Regardless of where the impact occurs, whether globally, regionally or locally, we're doing what is prudent to control mercury air emissions in Nevada.

Q. Why isn't NDEP applying the regulations that were recently adopted by EPA for the coal-fired power industry to metal mining?

A. The Nevada mercury control program is much more aggressive in the level of control and the timing of control than the federal power plant rule, also known as the Clean Air Mercury Rule (CAMR). The CAMR approach calls for 50% reduction in mercury emissions from the

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coal fired power plants by 2010 and a 70% reduction by 2020 and allows for mercury air emissions trading that could create the potential for an increase in emissions in some areas of the country.

According to the US EPA, the Nevada Voluntary Mercury Reduction Program has already achieved an 80+% reduction from the baseline emissions at the principal mercury sources. The NMCP now seeks to assure that these reductions are maintained through increased monitoring and testing, further improvements in mercury control and expanding applicability to additional sources. Nevada is now looking to improve on the voluntary program by assuring that these reductions are maintained, through increased monitoring and testing, and seeking any further improvements in mercury control that are available.

Q. What is a PMACT and why is it established during the first phase of the program?
A. PMACT is the acronym for Presumptive Maximum Achievable Control Technology. The purpose of identifying current control devices as PMACT is to ensure the continued implementation of controls that have been operating under the previous Voluntary Mercury Control Program. The purpose is not to pre-judge controls as MACT. In time, the program will evaluate the efficacy of each control device and transition to the full implementation of the new Nevada MACT (NvMACT) program. The NvMACT may result in the requirement for additional or updated controls at facilities. Identifying current controls as PMACT does not mean that they will ultimately be found to constitute NvMACT.

Q. Why isn't NDEP setting an NvMACT for mercury earlier in the process rather than going through two phases?
A. NDEP needs to gather additional information during the first phase about each facility's processes and control device(s) in order to establish that the efficiency of the devices is maximized and qualifies for designation as NvMACT.

Q. Under the new program, will there be additional reductions in mercury air emissions?
A. The Voluntary Mercury Reduction Program (VMRP) was designed to address the most significant sources of mercury air emissions. According to the US EPA, the VMRP companies comprised more than 90 percent of reported mercury air emissions in Region 9 in 2000. The VMRP companies have already reduced their emissions by more than 80% and the remaining companies comprise a much smaller portion of the potential emissions. The new program will increase mercury emissions controls. However, the NDEP does not anticipate that these controls will result in the dramatic overall reductions experienced over the last three years. Furthermore, with the possibility of global economics driving new operations and/or increased production at existing facilities, it is possible that future total emissions may increase, but with the controls in place, more mercury will also be captured. This is why NDEP is focused on maximizing controls rather than quantifying future percentage reductions.

Q. Does this program address fugitive dust emissions that may contain mercury?
A. The primary focus of this program is to control mercury emissions from thermal units. The NDEP expects that this will have the most immediate impact on controlling mercury emissions. Fugitive emissions that may contain mercury are controlled under existing regulatory requirements.

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Q. Will continuous monitoring for mercury emissions be required under Nevada's mercury control program?

A. Nevada will be requiring direct emissions testing and the program will require monitoring of the control devices to assure that they are operating properly to minimize mercury emissions. When specific emission limits are established, the NDEP will evaluate all testing and sampling methodologies available, including mercury Continuous Emissions Monitors (CEMs), to ensure adequate data is obtained to demonstrate compliance with the limits.

Q. Who participated in the development of the Nevada Mercury Air Emissions Control Program?

A. NDEP listened to the concerns of stakeholders and interested parties. Multiple meetings were held with EPA's Regional offices and headquarters, neighboring states, companies who have participated in the voluntary program, companies that will be included in the new program, environmental groups, researchers and individuals. NDEP values the participation of a broad range of experts and developed the regulatory program with this input in mind.

Q. When does this program become effective?

A. This program must go through a regulatory development process. Part of the process includes public workshops anticipated for December 2005. Depending on the outcome of those workshops the regulations could be adopted in early 2006.

Q. How can I participate in the adoption of regulations for this program?

A. As with any new regulation, NDEP will post public notices on the dates and times for program workshops. For more information, contact the NDEP Air Programs at 775-687-9350 or visit the NDEP Public Notice webpage at http://ndep.nv.gov/admin/public.htm.

Q. What are the timelines for full implementation?

A. Upon approval of the regulatory provisions, the timeline for full implementation is approximately ten years. This includes time to collect information to determine what devices qualify as Nevada MACT (NvMACT). A proposed early reduction credit program creates an incentive for early adoption of controls that will be initially identified by the NDEP as Presumptive MACT. Such interim steps for construction of control devices at newly participating facilities will continue to increase the degree of control on thermal emissions until a formal standard is adopted.

Q. What will NDEP do if a metal mining company does not comply with the requirements of the program?

A. As with any regulatory program, NDEP will initiate an enforcement action for non-compliance.

Q. Will there be enhancements to this program?

A. Yes, just as NDEP evaluated the VMRP program in 2005, the regulatory program will undergo a complete review after five years and will be continuously updated as the need arises. NDEP will continue to work with EPA, affected states and interested stakeholders to identify research areas of interest, as well as to identify the entities most appropriately equipped to respond with future research programs. NDEP will continue to evaluate Nevada's mercury program with an eye to further enhancements that will result in additional mercury control within this industry sector.

Q. *What are the health effects from mercury exposure?*

A. The US EPA has an excellent website located at www.epa.gov/mercury which covers numerous topics, including information on the health effects of mercury exposure.